



PUTTING RESEARCH TO WORK

BRIEF

The Benefits of Better Highways: A Case Study

Wisconsin Highway 29, once a hilly, curvy two-lane highway nicknamed “Bloody 29” for the high fatality rate along some sections of the roadway, is now a major east-west route. Historically, the north central Wisconsin highway has served as an important link to trade, tourism and recreation opportunities for more than 20 Wisconsin communities, including Green Bay, Wausau, Chippewa Falls and Eau Claire. It intersects with Interstate 94 and continues west to the Minneapolis-St. Paul metropolitan area, one of the largest trade centers in the Midwest.

What’s the Problem?

Over the years, as the economies of the state and the communities along the corridor grew and diversified, the highway became increasingly dangerous, with heavy traffic flowing through small communities at all hours of the day. Safety hazards were not only claiming lives, but also hindering the ability of communities in the corridor to achieve their full economic and growth potential.

In the mid-1980s WisDOT made a commitment to convert WIS 29 to a four-lane highway between Green Bay and Chippewa Falls by the end of 2000. In 1989, the expansion’s potential benefits were outlined in an economic impact study. Now that construction is complete, it is important to assess the extent to which these benefits were achieved.

Research Objectives and Methodology

The purpose of this study was to identify the economic benefits of the completed expressway and compare them to the original 1989 projections. Researchers performed an economic impact study using methodology outlined in a 2001 Federal Highway Administration research project. They also used additional analytical methods, such as using Geographic Information System applications to map businesses and land use activities along the corridor.

Leaders of communities along the highway corridor were interviewed to create community profiles and development plans. Researchers also surveyed business owners and property assessors, and analyzed economic indicators including population growth rates, per capita income data, property tax values, average daily traffic volumes, tourism expenditure data and county commuting patterns.

Economic data before, during and after the highway expansion was analyzed, and economic changes along WIS 29 were compared with changes along two-lane US 10, a highway just south of WIS 29 that serves a similar population.

Results

According to local officials and business leaders, the improvements to WIS 29 had a positive overall impact on the communities and businesses along the highway. The four-lane highway provides faster travel times, reduced congestion, better access to the expressway, and improved safety and driving conditions.

Community Economic Impacts

Communities along the corridor have accelerated their planning efforts for commercial and industrial development. In turn, the highway expansion has improved employment prospects for job seekers in these communities. Other community economic impacts included:

- From 1996 to 2001, total employment along the corridor increased by 11.3%, exceeding the state-wide growth of 8.7% during the same period.
- Economic modeling estimates the highway expansion will provide a statewide disposable personal income benefit of \$1.4 billion by 2020.

Investigator



“We found that total employment along the WIS 29 corridor increased by 11.3%, exceeding the state-wide job growth rate of 8.7% during the same period.”

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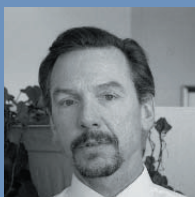


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Researchers studied the economic impacts of the expanded four-lane WIS 29 (shown in blue above), including comparisons with US 10 (in red), a nearby two-lane highway (Fig. 1, page 2 of final report).

Business Impacts

Businesses have benefited from faster, more reliable product delivery and improved conditions for truck traffic. Decreased travel times have allowed businesses to attract employees from greater distances.

Impact on retail stores has been mixed, with the expanded highway bringing more customers but also generating competition from stores in larger communities. Bypasses of local communities have reduced downtown truck traffic, but some retailers have reported a decrease in “impulse stops” from travelers passing through town. Detailed business impacts included:

- Between 1995 and 2003, the number of businesses in the communities along the highway increased from 10,464 to 16,256, a 55% increase.
- Between 1990 and 2001, 151 new and expanded manufacturing plants located within five miles of the four-lane highway, creating 6,269 jobs.

Comparison with US 10

During the study period, some economic indicators analyzed for expanded WIS 29 and two-lane US 10 were relatively similar, including population growth, tourism expenditures, per capita income growth and property values. Key differences included:

- As noted above, the number of businesses in the communities along WIS 29 increased 55% between 1995 and 2003; in the same time period, businesses along US 10 increased only 17%.
- Between 1990 and 2001, 6,269 jobs were created by new and expanded manufacturing plants within five miles of WIS 29, compared with 5,501 along US 10.

Benefits

Economic impact studies are a routine aspect of transportation planning at state DOTs. However, there has been a lack of post-construction studies documenting the actual economic impacts of completed highway projects. This research begins to fill that gap, providing a methodology other agencies can emulate.

Specific to the WIS 29 expansion, this study demonstrated that the economic benefits forecast in the 1989 study were realized, and in some cases exceeded. In addition, the economic and land use data gathered in this study will serve as a benchmark for future impact studies along this corridor.

This brief summarizes Projects 0092-02-17 and 0092-03-06, “Economic and Land Use Impacts of Wisconsin State Trunk Highway 29,” produced through the Wisconsin Department of Transportation Research, Development & Technology Transfer Program, 4802 Sheboygan Ave., Madison, WI 53707.

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